

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-025508**Date Inspected:** 05-Aug-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai**CWI Name:****CWI Present:****Yes No****Inspected CWI report:** **Yes No N/A****Rod Oven in Use:****Yes No N/A****Electrode to specification:** **Yes No N/A****Weld Procedures Followed:****Yes No N/A****Qualified Welders:** **Yes No N/A****Verified Joint Fit-up:****Yes No N/A****Approved Drawings:** **Yes No N/A****Approved WPS:****Yes No N/A****Delayed / Cancelled:****Yes No N/A****Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector R. Hernandez was present during the time noted above and conducted observations relative to the work being performed.

The QA Inspector randomly observed the following work in progress:

Boat Lift 13W

This QA Inspector witnessed the final bolt tension verification on bolts connecting connection plates as described below and at the locations listed below, The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00741 & 00743 dated August 5, 2011.

- Bottom Plate splice I-rib splice and Edge Plate I-rib splice PP120~PP120.5 13AW + 13BW CW side.
- Angles for steel barrier rails at bottom side of deck plate PP117.5~PP124.5.
- FL-3 area Architectural Housing Plate Floor Beam to Side Plate.
- Catwalk Railing PP117.5~PP124.5 (note: all bolts are required to be tightened to snug tight condition only).
- Side Plate to FL-3 PP118~PP120.

The bolt sizes used were M27 x 95 RC Lot # DHGM270034 and the final torque value established was 647 N-m, M27 x 100 RC Lot # DHGM270039 and the final torque value established was 673 N-m, M24 x 65 RC Lot # DHGM240013 and the final torque value established was 5407 N-m, M22 x 70 RC Lot # DHGM220137 and the

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final torque value established was 400 N-m, M22 x 80 RC Lot # DHGM220140 and the final torque value established was 380 N-m, & M22 x 120 RC Lot # DHGM220145 and the final torque value established was 497 N-m.

Torque wrench used was Serial No. XO2-777 & XO2-676.

Boat Lift 14W

This QA Inspector witnessed the in-process high strength bolt installation on bolts connecting the following connections:

- Horizontal connection plates between Longitudinal Diaphragms and Floor Beams on W3 and W4 lines from bottom plate elevation to Deck plate elevation between PP125 and PP128.3. Pretensioning and installation in progress.

Bolting on the above named areas is in progress and still requires final tension verification prior to final acceptance. The QA Inspector verified installation of the high strength bolts on a random basis and the results appeared to be in general compliance. No notifications have been issued for these installations.

This QA Inspector witnessed the final bolt tension verification on bolts connecting connection plates as described below and at the locations listed below, The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00741 & 00743 dated August 5, 2011.

- Cable Trays PP125~PP128.3 I-rib @ Bottom Plate W3 to W4.
- Catwalk Railing PP125~PP128.3 (note: all bolts are required to be tightened to snug tight condition only).
- Angles for steel barrier rails at bottom side of deck plate PP117.5~PP124.5

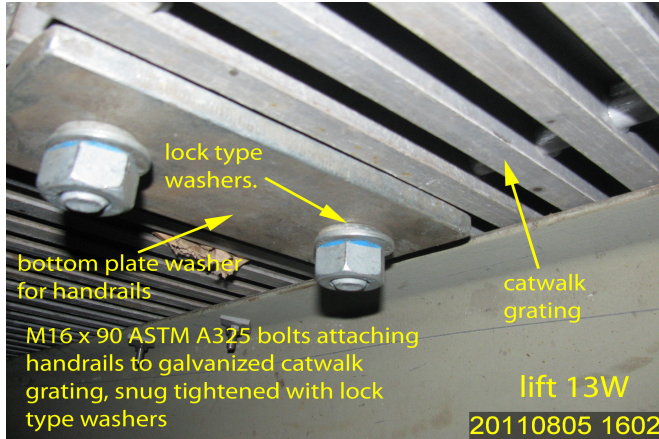
The bolt sizes used were M20 x 50 RC Lot # DHGM200037 and the final torque value established was 366 N-m, M20 x 55 RC Lot # DHGM200014 and the final torque value established was 420 N-m, M20 x 65 RC Lot # DHGM200017 and the final torque value established was 347 N-m, & M22x120 RC Lot#DHGM2200145 and the final torque established was 497 N-m.

The Manual Torque wrench used was Serial No. XO2-777 & XO2-676.

Unless otherwise noted above all items observed on this day appeared to be in general compliance with the applicable contract documents

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Summary of Conversations:

Pertinent conversations are included in the body of the report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 1500-0042-02372, who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez, Rene
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Quality Assurance Inspector

Reviewed By:	Hall, Steven
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QA Reviewer
